

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF DELAWARE**

IN THE MATTER OF INTEGRATED RESOURCE)	
PLANNING FOR THE PROVISION OF)	
STANDARD OFFER SERVICE BY)	
DELMARVA POWER & LIGHT COMPANY UNDER)	DOCKET NO. 07-20
26 <i>DEL. C.</i> § 1007(c) & (d): REVIEW OF THE INITIAL)	
RESOURCE PLAN SUBMITTED DECEMBER 1, 2006)	
(OPENED JANUARY 23, 2007))	

**COMMENTS OF NRG ENERGY, INC.
ON INTEGRATED RESOURCE PLAN FILINGS
OF DELMARVA POWER & LIGHT COMPANY**

INTRODUCTION

On December 1, 2006, Delmarva Power & Light Company (“Delmarva” or “DPL”) submitted to the Delaware Public Service Commission (“Commission”) pursuant to provisions of the Electric Utility Retail Customer Supply Act of 2006 (“EURSCA” or the “Act”), its compliance filing (“Compliance Filing”) in Docket No. 06-241, intended to address the substance of Delmarva’s Integrated Resource Plan for the years 2007 to 2016 (“IRP”). In response to a December 13, 2006 Letter of Concern from the Commission staff, Delmarva made an additional filing of its supporting documentation on January 8, 2007 (“Supporting Documentation”). Further filings and correspondence made by Delmarva in the matter of its IRP are described herein.

Pursuant to Commission Order No. 7122, the Commission opened the above-referenced docketed proceeding and solicited comments as to (1) the Commission’s standard of review of the IRP and whether 6 Del. C. §1007(c)(1) enabled the Commission to reject or accept Delmarva’s IRP in whole or in part; and (2) the substance of

Delmarva's IRP filings, submittals, plans, proposals and procedures in the above-referenced docket to the Commission and to the Delaware Office of Management and Budget, the Delaware Energy Office and the Delaware Controller General (the "State Agencies"). For the reasons set forth below, NRG Energy, Inc. ("NRG"), an intervenor in this Docket, believes that the Commission should reject Delmarva's IRP in whole.

I. The Commission Has the Authority to Reject – in Whole or Part – Delmarva's IRP

The Delaware Code provides the Commission with broad authority to regulate public utilities. Section 201 of Title 26 of the Delaware Code confers upon the Commission "exclusive original supervision and regulation of all public utilities and also of their rates, property rights, equipment, facilities, service territories, and franchises so far as may be necessary for the purpose of carrying out the provisions of [Title 26]." 26 Del. C. § 201. Further, the Commission is empowered by Title 26 to investigate, "upon its own initiative or upon complaint in writing, any matter concerning any public utility." 26 Del. C. §206.

In the specific context of Delmarva's IRP, the General Assembly vested the Commission with the authority to "oversee" the IRP process, which includes overseeing: whether Delmarva relied exclusively on any particular resource or purchase procurement process; whether Delmarva explored in detail all reasonable short- and long-term procurement or demand-side management strategies, even if a particular strategy is ultimately not recommended by Delmarva; and whether at least 30 percent of the resource mix of Delmarva is purchased through the regional wholesale market via a bid

procurement or auction process held by Delmarva. 26 Del. C. §1007(c)(1)(a.). Further, the General Assembly enumerated seven subjective factors that Delmarva may consider the economic and environmental value of, with the mandate that the IRP itself must investigate all potential opportunities for a more diverse supply at the lowest reasonable cost. 26 Del. C. §1007(c)(1)(b.). And the Commission was granted the explicit authority to promulgate any rules and regulations “it deems necessary to accomplish the development of IRPs” by Delmarva – a broad grant of oversight authority itself. 26 Del. C. §1007(c)(1)(c.).

Although §1007(c)(1) may not provide an explicit direction to the Commission to “review and approve” the IRP, Delaware case law has consistently provided administrative agencies with the implicit powers needed to accomplish their purposes. *State v. Worsham*, 638 A.2d 1104, at 1107 (Del. 1994) (“It is well-settled Delaware law that ‘the authority granted to an administrative agency should be construed so as to permit the fullest accomplishment of the legislative intent or policy.’”); *Atlantis I Condo. Ass’n v. Bryson*, 403 A.2d 711, 713 (Del. 1979) (“An expressed legislative grant of power or authority to an administrative agency includes the grant of power to do all that is reasonably necessary to execute that power or authority.”); *Retail Liquors Dealers Ass’n. of De. v. Alcoholic Bev. Control Comm.*, 1980 WL 273545 at *3 (Del. Ch.) (“When an agency is vested with a broad range of discretionary powers it is likely that the General Assembly intended to vest implied authority in such agency to do that which is incidental, implied, necessary and proper in light of the objectives sought to be gained and in light of the express powers granted.”). And when an administrative agency’s powers are questioned, Delaware courts have likewise given great deference to the

agency's interpretation of its own enabling statute. *Chesapeake Util. Corp. v. Del. Pub. Serv. Comm'n*, 705 A.2d 1059, 1065 (Del. Super. 1997) (substantial weight should be given to the Commission's interpretation of a statute it is empowered to enforce, provided that construction is not clearly erroneous (*citing Vassallo v. Haber Elec. Co.*, 435 A.2d 1046, 1050 (Del. Super. Ct. 1981))).

Here, the Commission is responsible for overseeing the IRP process to protect the interests of all Delawareans. The Commission, therefore, undoubtedly has the authority pursuant to the provisions of Title 26 – including §201 and §1007 -- to do that which is reasonably necessary, incidental and implied to manage review and assess the various aspects of the IRP and to protect the Delaware public affected by the decisions made through the IRP process. As noted above, the IRP process requires that Delmarva's IRP meet specific criteria and also that there be a balancing of certain factors expressly enumerated by the Delaware General Assembly. Assessing whether Delmarva has met the stated requirements and goals of §1007(c) necessarily involves more than a cursory review and approval of Delmarva's IRP and demands a thorough vetting and approval process (akin to the process outlined in §1007(d) with respect to the Requests for Proposal), and also includes affording the Commission the power to reject the IRP -- in whole or in part. In short, the Commission has the authority to oversee and supervise the IRP – including rejecting Delmarva's IRP -- which course of action we respectfully recommend that the Commission adopt in this case.

II. Delmarva's IRP Should Be Rejected In Whole Since the IRP Does Not Meet the Stated Goals of 26 Del. C. §1007(c)

Delmarva Wishes to Revisit Settled Principles

The IRP process has been mandated by the State of Delaware, yet Delmarva appears to view this planning opportunity as a vehicle for complaints about a variety of matters outside the scope of the IRP -- including most notably Delmarva's resistance to undertaking the IRP itself. Delmarva's willingness to rebuff the State's express desire for a viable IRP is evidenced by Delmarva's consistent re-argument, in its IRP, of positions it has taken in past debates regarding the structure of the electric power industry in Delaware and what it views as the circumscribed scope of the Commission's regulatory oversight. For example, Delmarva states:

Customer Choice and IRP are not complementary. We have made this point before: the last IRP, filed on June 30, 1997, by Delmarva, indicated that "Delmarva supports retail choice, but, its advent threatens the basic premise on which IRPs rely: that a utility has an exclusive right and corresponding obligation to serve customers in its franchised service territory." Delaware is singularly unusual in requiring an IRP where all customers are eligible to choose an alternate supplier. The ability of customers to choose alternate suppliers greatly increases the risks associated with long-term procurement commitments. This is particularly true of long-term power purchase agreements ("PPA") that have the very real potential to obligate customers to buy fixed amounts of energy at above-market prices. A long term PPA also greatly increases the likelihood that customers will be subjected to non-bypassable wires charges to recover stranded cost.¹

Delmarva also adds:

[T]he market circumstances regarding the SOS customers of Delmarva are not consistent with traditional IRP planning... While Delmarva provides SOS power to its customers who have not chosen other suppliers, these customers retain the

¹ Delmarva Power & Light Company Integrated Resource Plan 2007-2016 Compliance Filing, PSC Docket No. 06-241 (filed on December 1, 2006)(hereinafter "Compliance Filing") at Pages 4-5.

right to switch from SOS service to alternative suppliers without notice or penalty. In fact, Delmarva's last IRP, filed on June 30, 1997, indicated that: "Delmarva supports retail choice, but, its advent threatens the basic premise on which IRPs rely: that a utility has an exclusive right and corresponding obligation to serve customers in its franchised service territory."²

The Commission and the State Agencies involved in the IRP process are responsible for implementing the laws of Delaware but do not make the law. Delmarva should not be raising arguments about the compatibility of an IRP process with an electricity distribution company in this proceeding; this matter is settled law and despite Delmarva's interest in doing so, the reviewing agencies cannot turn back the clock to a time when customer choice for Delawareans was a goal and not a reality.

Separate Dockets; Similar Issues

In addition to a desire to revisit past state policy decisions in an inappropriate forum, Delmarva has engaged in some objectively odd procedural maneuverings in connection with its obligations under the Act. This is particularly the case in connection with Delmarva's separate PSC filing made on February 6, 2007 titled "Blueprint for the Future Plan" ("BF Proposal").³ This document, as discussed in some detail below, outlines Delmarva's plans as to how Delmarva intends to meet the needs of its SOS customers in line with its IRP. Perhaps this document was separately provided to avoid having the issues presented in that document subjected to the scrutiny of the parties in the existing dockets with respect to the IRP and RFP. Such an approach must be rejected. One fundamental point of the Act was to evaluate the energy needs of Delmarva's SOS

² *Id.* at 11.

³ Blueprint for the Future Application and Plan, (Filed on Feb. 6, 2007) (The PSC has yet to assign a docket number to Delmarva's Blueprint for the Future Plan filing).

customers by having the Commission and the State Agencies take a hard look at the needs of those retail customers and how they should be supplied in an efficient, effective and environmentally sound manner. The procedural necessity of docketing certain matters (like the IRP and RFP) under separate docket numbers notwithstanding, the Commission cannot lose sight of that fundamental goal. Accordingly, NRG addresses herein its issues with the IRP, the BF Proposal and the RFP in the manner which the legislature intended; *i.e.*, as an integrated look at the energy needs of Delmarva's SOS customers. NRG demonstrates below that its proposed IGCC project is consistent with meeting the goals of the Act in conjunction with (and not to the exclusion of) some of the actions proposed by Delmarva in its BF Proposal, and requests that the BF Proposal be included as part of Docket 07-20.

Delmarva's Predisposition Against Long-Term Power Purchase Arrangements

Notwithstanding the clear legislative proscription in EURSCA of those matters that are to be considered (as described in Part I above) in its Compliance Filing, Delmarva seems overtly hostile to entering into a power purchase agreement with a power producer, and appears to have prejudged the outcome of the RFP so as to maintain the current practice of meeting SOS requirements through purchases of wholesale power from the market. In characterizing the current SOS procurement process, Delmarva explains that customers will "not be exposed to the risks associated with owning a generating asset...."⁴ And again, in discussing the Act Delmarva states its preference for

⁴ Compliance Filing at Page 6.

not signing long-term agreements and for continuing with the current SOS procurement arrangements:

“While Delmarva appreciates the intent of EURCSA to help stabilize prices for Delaware SOS customers, the existence of customer choice requires that an IRP recognize the ability of SOS customers to select alternate energy suppliers . . . The best way for Delmarva to avoid exposing its customers to stranded costs, and mitigate the price volatility risk posed by migration, is to avoid long term commitments and limit the term length of energy supply commitments as is effected by Delmarva’s current energy procurement process.”⁵

In sum, Delmarva is either unwilling or unable to submit an IRP that will objectively consider whether a long-term power purchase agreement should be executed to encourage the development of new generation in Delaware to serve SOS customers.

Compatibility of Demand and Supply Technologies

The essence of an IRP is the development of an integrated plan, taking account of all resources – including supply resources (generation and transmission) and demand resources (including conservation and demand management) – to meet the customers’ needs over the planning horizon.

Only toward the middle of its Compliance Filing does Delmarva begin substantively to address the requirements of its SOS customers. In Figure 1, Delmarva presents a graph depicting the load profile of its Residential and Small General Service/Industrial (“RSCI”) rate class customers over a period of two weeks in September of 2005.⁶ The graph shows a pattern of large but regular variations in demand for energy by RSCI customers. Although Delmarva’s point is to argue (yet again) against fixed quantity supply contracts, the lower load factor of Delmarva’s RSCI customer class

⁵ Compliance Filing, at Page 9.

⁶ *Id.* at 10.

is an appropriate issue for consideration in the IRP. Given the SOS customers' load profile, NRG responded in the RFP with a "virtual turndown capability" proposal that would allow Delmarva to reduce its take from 400 MW down to a level of 280 MW in off-peak hours. Contrary to Delmarva's suggestions, NRG has not insisted on a fixed quantity supply contract in its response to the RFP.

NRG also notes that, on a going forward basis, Delmarva appears to be considering steps to improve its customers' load factors. Although the BF Proposal has many components, the key elements appear to be an aggressive demand side management ("DSM") program and the early adoption of advanced metering infrastructure ("AMI") that may provide customers with real-time pricing information. Delmarva's BF Proposal also includes a "Bill Stabilization Adjustment" ("BSA") which would serve to reduce volatility in customers' bills resulting from variations in service demanded as a result of such factors as the weather.

Although NRG believes that the particulars of the BF Proposal components (including the "AMI Adjustment Mechanism"⁷) must be carefully scrutinized by the Commission, many aspects of Delmarva's DSM and AMI proposals are fully compatible with NRG's proposed baseload, coal-fueled Integrated Gasification Combined Cycle ("IGCC") project at the Indian River site. Generally speaking, DSM and AMI programs act to trim peak demand by shifting the operation of customers' equipment that can be deferred – such as water heaters, clothes dryers and dishwashers – to lower priced off-peak periods. DSM and AMI programs serve to improve customers' load factors by "flattening the peaks and filling in the valleys" of their load profile. If successful, such

⁷ BF Proposal, Appendix at 78-79.

programs can reduce the need for expensive system peaking capacity such as gas-fired combustion turbine generators, and perhaps, for mid-range generating units such as gas-fired combined cycle units. But such programs do not eliminate the need for baseload generation of the type that NRG has proposed.

There is an incredible irony, which should not be lost to the Commission, in Delmarva arguing, in both the IRP and RFP proceedings, against making long-term commitments with baseload energy suppliers – and citing to RSCI customers’ low load factors as part of its justification -- while simultaneously requesting authorization from the Commission, under the cover of a separately docketed proceeding, to initiate a massive investment program to improve these load factors.

Although NRG believes that a successful DSM and AMI program is entirely compatible with a new baseload IGCC project, NRG is also mindful that Delmarva’s DSM and AMI proposals may not be fully successful or may end up costing more than anticipated. The record of success for electric utilities’ DSM and AMI initiatives over the past 30 years has been mixed, at best.

Problems and Pitfalls of DSM

Upon review of the data provided by Delmarva, the forecasted DSM demand and energy savings are both highly concentrated among a small number of programs. DSM demand savings are extremely concentrated with four non-residential programs contributing over 70% of the savings forecasted for 2016 and two programs (Commercial SmartStats and Non-Residential High-Efficiency HP and AC) accounting for 54% of the savings. The expected demand savings are shown to actually decline between 2013 and

2016. Energy savings are similarly concentrated among a few programs, with Residential and Non-Residential lighting programs contributing nearly 50% of the total forecasted savings for 2016. The top four programs contribute 70% of the savings. The forecasted DSM savings reflect the fact that the IPM planning model selected 100% of the program potential for most all of the chosen programs, for almost all years. As such, one would expect the forecasted savings to represent an upper bound of likely program impacts.⁸

The testimony to the Federal Energy Regulatory Commission (“FERC”) by PJM Senior Vice President for Reliability Services, Michael J. Kormos, regarding demand side resources, designed “to translate a demand side resource as a tool for the system operator into an option for the system planner requires consideration of several points” is instructive.⁹ Mr. Kormos noted:

1. Reliance on a demand side resource to meet a reliability need on the system may be difficult, given the uncertain character of most current demand side resources.
2. In order for demand side resources to be considered on par with infrastructure, a firm contractual commitment made today to be available as a demand side resource five or more years into the future must be considered. Given the potential economic and reliability consequences that might result from a breach of that obligation, the contract would need to include potentially large liquidated damages provisions. To the extent securitizing this exposure is deemed necessary, the immediate cost of the resource could prove prohibitive.
3. In PJM’s experience, the system operator can only rely on a certain percentage of registered demand response customers to voluntarily curtail when the offer is put to them. It is difficult to envision anything but a mandatory curtailment commitment as practicable when thinking of demand side resources as a planning tool to substitute for infrastructure investment.¹⁰

⁸ Data provided by Delmarva & ICF in Request for Proposals Bid Evaluation Report.

⁹ FERC Docket Nos. RM05-25-000 and RM05-17-000, response to question #8 “What is the appropriate role for demand response in Planning?”, Oct. 12, 2006, p. 18.

¹⁰ *Id.*

Additionally, PJM has found that constant monitoring is required to ensure that double-payments – *i.e.*, payments for actions that would have been taken anyway – do not occur under DSM programs. Moreover, numerous violations of the intent of these programs have been discovered through the years and have required intervention. Most recently, on February 2, 2007, PJM submitted a filing to FERC under Section 205 of the Federal Power Act to address the problem of entities enrolling in, and receiving incentive payments under, PJM’s demand response programs while not providing the demand reduction benefits that PJM’s economic load response program was designed to produce.¹¹

NRG anticipates that Delmarva may respond to these examples of problematic DSM implementation by arguing that its BF Proposal will be different from what has gone before. Delmarva may argue that its proposed new technology will solve the problems of customers not fully responding to directives for load reductions, double payments and payments made to parties who do not provide the agreed upon response. NRG urges caution on the part of the Commission. New technology, both new hardware and new software, can sometimes solve long-standing problems, but often introduce new problems of its own. The Commission should consider retaining independent outside experts to review the specifics of Delmarva’s proposed DSM and AMI plans. Nothing should be approved in the absence of a rigorous benefit-cost study and independent modeling.

Finally, NRG notes that Delmarva is apparently employing a double standard with respect to its evaluation of new technologies: In the RFP bid evaluations, Delmarva

¹¹ FERC Docket No. ER07-508-000.

penalized NRG's proposed IGCC project in part because Delmarva erroneously viewed gasification technology as "a struggle for the last 20 years."¹² And yet, Delmarva has offered to embark upon a complex array of technologies that in the eyes of many commentators have been a bigger struggle for a longer time. The IRP process, by definition, is supposed to be *integrated*: as such, the Commission should employ equal standards for evaluating NRG's and Delmarva's proposals.

DSM, AMI and Energy Conservation

NRG urges the Commission to be attuned to any undue optimism with respect to certain energy conservation technologies that Delmarva is including in its BF Proposal. Recent technological advances in communications systems (*e.g.*, fiber optic cables, wireless networks, broadband over power line technology, and generally, the internet) coupled with advances in the capability of, and cost reductions for, microprocessors may (if successfully implemented) make DSM and AMI concepts that had previously been infeasible now practical. But the same cannot be said for many of the BF Proposal's conservation technologies.

DSM and AMI technologies depend upon "intelligent" equipment, networks and systems in order to manage electric loads. In contrast, conservation technologies are generally premised upon a simple substitution of capital investment for energy. While DSM and AMI technologies improve load factors by flattening the peaks and filling the valleys, conservation technologies reduce energy requirements, usually by means of installing some kind of more expensive hardware. In its Supporting Documentation,

¹² Delmarva Power & Light Company's RFP Bid Evaluation Report, Feb. 21, 2007, at 53.

Delmarva analyzes the potential of a large number of energy conservation technologies.¹³ These technologies include energy-efficient windows for private residences; high-efficiency air conditioners and heat pumps; high-efficiency dishwashers, clothes washers and refrigerators; ground-source heat pumps; compact fluorescent lighting fixtures (“CFLs”); and home weatherization. All of these technologies have been touted by environmentalists, community activists, academics and pundits for over 30 years. Across our nation, many electric utilities (including those within Delmarva’s corporate family) have had previous experience with energy efficiency advertising campaigns and rebate programs for purchases of energy conserving equipment and appliances. Many such programs have been undertaken, but the results never quite seem to live up to their expectations.

NRG finds it self-defeating that Delmarva points to California’s DSM programs as having kept their “energy consumption stable, although its economy has grown dramatically.” It is difficult to imagine that the intent of the RFP was to set the California energy market as a benchmark of stability, especially in light of California ISO’s issuance of Stage 1 and Stage 2 electrical emergency notices just this past July.¹⁴

Looking specifically at California’s DSM programs for an example, NRG points to a California Public Utilities Commission (“CPUC”) 2006 Report which shows that out of an enrolled program demand of 1,821 MW the actual demand response performance in July 2006 was only 1,217 MW, an overall effectiveness of approximately 66%.¹⁵

¹³ See, e.g., Supporting Documentation, Exhibit 3.15, p. 35.

¹⁴ California ISO news release July 24, 2006.

¹⁵ CPUC Energy Division Staff, 2006 Resource Adequacy Report, Feb. 2007 at 39.

Furthermore, CPUC, the California Independent System Operator (“California ISO”), and various Independent Utility Operators (SCE, PG&E) recognize that even with DSM programs in place, there is still a need for local generation (within load service areas). This is illustrated by CPUC’s authorization of approximately 3500 MW of new generation to meet local resource adequacy requirements.¹⁶

The history of demand-side programs is perhaps best illustrated by looking to President Jimmy Carter’s National Energy Act of 1978 (the “NEA”), which included two major pieces of legislation aimed at demand-side programs. The National Energy Conservation Policy Act of 1978 was aimed at a wide variety of conservation measures, but today this act is largely forgotten. The Public Utility Regulatory Policies Act of 1978 (“PURPA”) was also part of the NEA. Title I of PURPA was its centerpiece; it required state regulatory commissions to consider implementing a wide range of utility rate reforms, including marginal cost and time-of-day rates, and the use of load management techniques.¹⁷ But today, PURPA is remembered solely for the unrelated Title II programs involving “qualifying facilities.”

This pattern is poised to repeat itself in this IRP. Environmentalists, community activists, academics and pundits once again are asking for government support to remedy a supposed market failure. Consumers are believed to be acting contrary to their own best interests by not appreciating the trade-off between money spent up front on more

¹⁶ See, Public Utilities Commission of The State of California, Docket No. R0602013 (Filed February 16, 2006), “Assigned Commissioner’s Ruling Addressing Electric Reliability Needs in Southern California for Summer 2007”, August 15, 2006; See also in same proceeding, “Pacific Gas & Electric Company’s Proposal on Policies Needed to Support New Generation and Long-Term Contracting” March 7, 2006; and “Comments of Southern California Edison Company (U 338-E) On Additional Policies Necessary to Support New Generation and Long Term Contracting” March 7, 2006.

¹⁷ See, *e.g.*, 16 U.S.C.A. § 2625.

expensive hardware and the savings to be realized later through reduced utility bills. With the government agencies' support, the utility company can implement programs to ensure that consumers make the "right" decision rather than the one they would otherwise choose.

NRG is highly skeptical of such arguments and urges the Commission and the State Agencies toward similar skepticism. NRG does not believe that electricity consumers are misinformed, uneducated or otherwise unable to appreciate the subtleties of economic trade-offs in their daily lives. In short, NRG does not accept that pervasive market failures are holding back the market penetration of energy conservation technologies.

For example, the decision by most electric consumers not to replace all of their light bulbs with CFLs is probably due to a variety of reasonable choices – *e.g.*, many consumers find the color balance of CFLs to be harsh, unnatural and "institutional"; some consumers are more sensitive than others to the flicker inherent in fluorescent lighting, including CFLs; some consumers may have noticed that CFLs do not reach full brightness when first turned on (*i.e.*, they need to "warm up") and they lose part of their light output as they age; and finally, many consumers have noticed that CFLs do not last as long as advertised, particularly in duty cycles requiring frequent on and off operation.

None of this would matter much, but for the fact that major decisions are at stake in this IRP proceeding, and that energy conservation is again being offered as an easy answer and alternative to encouraging the development of new power generation infrastructure. NRG applauds intelligent efforts at energy conservation generally but believes that it is best for both the economy at large and the environment that the

development of new, environmentally friendly generation technology be encouraged as part of the solution to Delaware's energy needs. The State must consider that, among other things, the IRP proceeding will lead to a decision as to whether new generation facilities will be constructed in Delaware. Delmarva is urging that no long-term agreements with generating companies be agreed to, and that any projects ultimately built in Delaware proceed as merchant facilities, if at all. In order to satisfy the requirements of the EURCSA and the IRP, Delmarva is proposing a massive investment program in DSM, AMI, energy conservation and other demand-side technologies without the construction of any meaningful new generation – a strategy which likely, in the end, will prove costly to all Delawareans.

Delmarva's Objectives

Delmarva has its reasons for taking these positions. As an electric distribution company (*i.e.*, a “wires company”), Delmarva earns its profits for its shareholders by earning a return on its distribution system. Delmarva is not in the power generation or supply business. Delmarva is allowed to recover the cost of supplying its SOS customers, but it does not earn a profit on supplying SOS. If fully accepted, Delmarva's BF Proposal will entail a major expansion of Delmarva's electric distribution ratebase – and therefore its profits -- with little risk to the company's ultimate shareholders. Among other things, Delmarva is seeking rate recognition of its investment in approximately 430,000 new “computer imbedded intelligent” electric and gas meters,¹⁸ accelerated

¹⁸ BF Proposal at 8.

recovery of the undepreciated cost of old metering infrastructure,¹⁹ a construction program for linking select distribution substations with its main offices via a fiber optic network²⁰ and the risk-reducing AMI Adjustment Mechanism and BSA proposals, discussed above. Additionally, the BF Proposal notes that Delmarva will in the future make filings for such projects as customer information system enhancements and automation of the company's distribution system.²¹ The Commission should expect that Delmarva's BF Proposal, as aggressive as it is, is only the first step in a much larger (and more expensive) plan. In contrast, NRG's proposal for an innovative baseload IGCC plant is self-contained.

The Case for New Generation in Delaware

In the RFP process proceeding in parallel with the IRP, NRG has proposed several options for a state-of-the-art IGCC project to be located at NRG's existing Indian River site, and for Delmarva's SOS requirements to be satisfied by purchases of 400 MWs of the plant's output (subject to the "virtual turndown" mechanics discussed above). Pursuant to its evaluation of all bids received, Delmarva has recommended that SOS loads continue to be met solely with short-term purchases from wholesale markets. This recommendation is problematic for a number of reasons that have yet to be considered.

First, in addition to its demand-side programs, Delmarva argues that a major high-voltage transmission project, the Mid-Atlantic Power Pathway ("MAPP") will open up

¹⁹ *Id.* at 11.

²⁰ *Id.* at 9.

²¹ BF Proposal at Page 9.

opportunities for sourcing low-cost power from outside the Delmarva Peninsula.²² NRG notes that MAPP is currently under study by PJM but has not been authorized. As currently proposed, MAPP would be a 230 mile, 500 kV transmission project, which is estimated to cost \$1.2 billion, originating in Virginia, crossing Maryland, extending through Delaware and ending in New Jersey. PJM views MAPP as part of a larger set of transmission improvements aimed at relieving congestion along the Delaware river, especially when another major transmission project, proposed by Allegheny Energy, goes into service.

NRG notes that transmission projects constructed for reliability reasons may be subject to power flows that are not compatible with economic energy trades. Under some circumstances, the MAPP line alone may yield little reduction in energy costs to Delmarva, and may even increase costs in certain situations, particularly without concomitant facilities built from further west in PJM that will enable energy deliveries from Western Pennsylvania to the Baltimore/Washington region. In view of MAPP's undecided status, high cost and the yet to be determined impact on regional power flows, the benefits to Delmarva with respect to sourcing its SOS requirements from short-term market purchases must be viewed as an open question.

Lack of Success in Siting Significant Transmission

If the Commission or the other parties to these proceedings believe that siting and constructing a 500 kV transmission project will be easy, they should look at the history of other major transmission lines that have taken more than a decade to move forward. The

²² See, e.g., Compliance Filing at Pages 4, 14-15; and, Supporting Documentation at Pages 6, 12.

Southwest Intertie Project, an approximately 500 mile, 500 kV line that would run from the Midpoint Substation in southern Idaho to the Las Vegas, Nevada area was awarded rights-of-way by the federal Bureau of Land Management in 1994, but the project was never built. In 2005, Idaho Power Company signed an option agreement with White Pine Energy Associates, LLC to transfer the permit rights.²³ Or consider the Marcy-South project in New York state. This project was developed, but the process took over 10 years in the face of widespread citizen opposition.²⁴

Additionally, meeting the power planning needs of the Delmarva service territory with transmission has other important consequences. In relying upon market imports, the generation infrastructure that is likely to increase output to address Delmarva's needs is baseload plant located in States that do not necessarily have as stringent emissions or other environmental requirements as Delaware. Conventional pulverized coal plants (for example) will run more often at the other end of the transmission line – and while out of sight of Delawareans – will impact this State through increased downwind migration of emissions and other effects, potentially to counties within Delaware that already face Clean Air Act attainment challenges. These environmental “knock-on” effects of relying on transmission as a principal planning tool for the Delmarva zone have the potential to reduce environmental quality for Delaware's citizens – a direct counterpoint to the effect of new generation as proposed in the RFP process, including NRG's innovative baseload IGCC project. The jobs and the tax base may go elsewhere, but the SO₂, NO_x, fine particulates, mercury and CO₂ – like the proverbial chickens – will come home to roost.

²³ www.idacorpinc.com/pdfs/factsheets/fs20052.pdf.

²⁴ *See, e.g.,*
<http://www.pressconnects.com/apps/pbcs.dll/article?AID=/20060521/NEWS01/605210362/0/NEWS01&template=themear&theme=NYRI>.

In the RFP evaluation process, Delmarva and its consultant, ICF International (“ICF”) modeled a scenario in which MAPP was not constructed. The results of the “No MAPP” scenario showed only very small increases in average power prices, a result which appears to cast doubt on the economic rationale for the MAPP project, at least with respect to Delmarva’s plans. NRG understands that ICF’s model does not reflect locational marginal prices and thus, may not have accurately reflected the economic impact of MAPP on Delmarva. If MAPP is to be part of Delmarva’s plans under the IRP, a detailed independent analysis by well qualified market analytics consultants, far beyond the runs of ICF’s model is required. In the absence of such analysis, the Commission should not accept MAPP as a substitute for new generation in Delaware as suggested by Delmarva. Even if the more detailed independent modeling shows benefits, the Commission should expect that construction of MAPP will involve a much greater use of land, and will impact more people directly, than will NRG’s IGCC proposal (given siting and permitting issues along the proposed transmission line route). NRG expects that if an order is ultimately sought authorizing construction of MAPP, complaints similar to those lodged against new generation facilities (such as NRG’s IGCC project) will materialize, demanding that MAPP not be built and arguing that conservation, demand-side programs and distributed generation will suffice to meet Delaware’s needs.

NRG urges the Commission to reject this view in the current proceeding. Reliance upon out-of-state generation for Delaware’s incremental needs – and as time goes by and older generating units are retired – for more and more of its total needs, is a bad bargain for Delawareans. Although local communities will be spared the temporary inconveniences of construction traffic and noise, the jobs and the tax base will

permanently migrate elsewhere. Delaware will also forfeit much of the environmental oversight that comes with the construction and operation of a plant within the State's boundaries. Without new in-state generation, Delaware will increasingly be exposed to the uncertainties of the wholesale markets -- a result that the EURCSA seeks to prevent.

A Realistic Assessment of Future Power Prices

Delmarva's consultant in the RFP process, ICF, appears to be projecting market prices to be lower than the value of the RFP bids received, but the record of market purchases elsewhere in PJM suggests that market prices will be higher than Delmarva expects. Consistent with its own proprietary electricity price forecasting models, NRG believes that publicly available data serves as a legitimate proxy, illuminating the questionable validity of the Delmarva/ICF reference case price forecast, and Delmarva's conclusion that no power purchase agreements with bidders in the RFP process are necessary or desirable. In the neighboring state of New Jersey, for example, an annual auction process is conducted whereby the state's four electric distribution companies -- Public Service Electric & Gas Company, Atlantic City Electric Company ("ACE", an affiliate of Delmarva), Jersey Central Power & Light Company and Rockland Electric Company ("Rockland") -- entertain bids for provision of their Basic Generation Service ("BGS") requirements. BGS is similar to the SOS that is the subject of the pending RFP. Of course, the bids are for a short time period of time, but the results are notable: the lowest priced winning BGS supply bid was received by ACE, at \$0.09959 per KWh (equivalent to \$99.59 per MWh); the highest priced winning BGS supply bid was received by Rockland at the equivalent of \$109.99 per MWh. The BGS prices received

by the other two electric distribution utilities fall in between these two, but in every case the BGS prices substantially exceed Delmarva's reference price.

More important, these prices are generally in line with the prices attributed by Delmarva to NRG's IGCC proposals, even including such added cost items as the debt equivalency charge, which NRG believes to be at best inflated and at worst inapplicable or potentially applicable to all market purchases. As NRG has explained in its Preliminary Comments on the RFP evaluations, the prices attributed by Delmarva to NRG have been inflated by a number of opaque modeling assumptions and techniques. If NRG's prices could be recalculated by a neutral party through a transparent process, NRG has confidence that its economics would compare favorably with public data points on pricing in PJM.

NRG encourages the Commission to be cautious about the outlook for wholesale market prices, independent of currently prevailing prices, and regardless of Delmarva's and ICF's apparently comforting forecasts.²⁵ The current excess capacity in the PJM region is rapidly being worked off, and new plants will have to be constructed soon. New plants will be more expensive than the existing fleet, and prices will likely rise as new capacity comes into service.

Moreover, new environmental regulations will impose new costs on the Midwest's fleet of existing coal units. In order to satisfy rules respecting regional ozone

²⁵ Regarding load growth in the region, the PJM 2007 Load Forecast has projected the DPL zone will increase by 1.9% per year for the summer annual peak load growth and 1.4% per year for the winter annual peak load growth from 2007-2017. Delmarva has the highest projected growth rates of any zone within PJM, and has experienced some of the highest actual growth rates in PJM. Comparing the current PJM forecasts of 2007 DPL zone peak to the February 2006 forecasts, forecasted peaks have increased by nearly 1% for summer and over 2% for the winter, illustrating the consistent increase in anticipated growth for the DPL zone.

transport and mercury emissions, these units will be facing major retrofits or retirement. New construction is unlikely to prove a panacea for this problem: gas-fired plants will suffer from all of the fuel price volatility that the EURCSA sought to avoid; traditional pulverized coal plants will have to be designed and built with extensive and costly pollution control equipment – if they can be permitted and built at all; IGCC plants built elsewhere are unlikely to be a better bargain than NRG’s current proposal; and new nuclear plants are currently an unknown quantity (but in any event, involve materially longer construction periods). Even environmentalists must admit that importing power over great distances will result in transmission losses and a corresponding increase in ultimate fuel consumption. Delmarva must consider the cost of these losses with the implementation of Marginal Losses on June 1st of this year at PJM. No longer will transmission losses be socialized, the true cost of line losses from generator to load will be born by the load zone where the power is delivered.

At several places in its Compliance Filing, Delmarva cites to regional planning efforts as answers to local energy and capacity needs. Delmarva notes that PJM is implementing its Reliability Pricing Model (“RPM”) which will serve as a capacity market.²⁶ Delmarva also notes PJM’s Regional Transmission Expansion Planning Process (“RTEP”), and goes on to say that RPM and RTEP “are expected to prompt transmission and generation infrastructure throughout PJM.”²⁷

It is worth noting that PJM market structure changes such as the Locational Marginal Pricing (LMP) energy market, the RPM Capacity market restructuring, Marginal Losses implementation and the introduction of various Ancillary Services

²⁶ Compliance Filing at Page 5.

²⁷ *Id.*

markets are aimed at creating a market environment in which existing and new merchant facilities may recover their capital investment. Market structure maturation is still needed in order to fully compensate new entry with adequate returns, but the course of improvement to this end over the past ten years has been dramatic in PJM and in other Independent System Operator (“ISO”) market areas such as the New York and New England ISOs.

There seem to be two implications of this. First, one can hope that PJM and its market reforms will ultimately plug any resource planning needs in the Delmarva zone (obviating the need for the current IRP process – consistent with the general tone of the Delmarva filings). Secondly, it can be hoped that power plant developers will proceed with merchant plants and look to PJM’s RPM solely for capacity payments and to PJM’s energy markets for variable cost recovery. In response, NRG notes that RPM is intended to encourage new generation in load areas where future reliability is of concern due to generation retirements and anticipated load growth. Of primary concern to PJM is the footprint east of the Eastern Interface. It will take time after the implementation of RPM to see the extent to which the intended results actually come to fruition. RPM payments may increase costs in the wholesale markets, and this will increase Delmarva’s cost of meeting its SOS requirements with short-term purchases. Further, NRG is fully aware of wholesale market developments in PJM, and has demonstrated a willingness to take substantial risk with its proposed IGCC project. The Commission should not expect NRG to take all of the risk of introducing innovative baseload technology at the Indian River site and the associated shut down of its existing units at that site – with all the

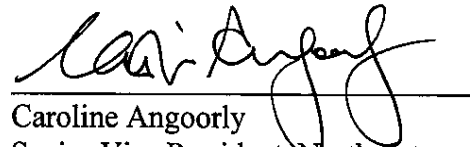
material energy and environmental policy benefits for Delaware that such a project will entail.

* * * * *

NRG is asking the Commission and the State Agencies not to endorse the “easy way out” that Delmarva is urging. Delaware needs new innovative power generation infrastructure to support the ongoing high quality of life enjoyed here well into the future. A good offer is on the table from NRG with utilization of innovative baseload IGCC with carbon capture and sequestration. This offer has a solid implementation plan, providing a way for Delaware to meet its growing energy needs – particularly in Sussex County – in a measured way. What will not be good for the Peninsula, or for the State as a whole, is over-reliance on ancillary measures (like those proposed in the Delmarva filings in this Docket), which attempt to address the problem, but not provide a tangible, reliable solution.

Respectfully submitted,

NRG ENERGY, INC.


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